

REMARKS/ARGUMENTS

Claims 1, 3-27, and 29-77 are currently pending. Applicants have amended claims 1, 5-9, 16-18, 27, 45, 46, 52, 54, 57, 71, and 72. Applicants submit that no new matter has been inserted into the application as a result of these amendments.

Claims 26 was objected to as having various informalities. Applicants have amended claim 26 and respectfully request that the objection to claim 26 be withdrawn.

Applicants would like to thank the Examiner for the interview on July 11, 2007 to discuss the references cited in the most recent Office Action and proposed claim amendments. No agreement was reached.

Reconsideration of the claims in view of the amendments above and the

Claim Rejections under 35 U.S.C. § 102

Claim 18 stands rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,867,882 to Takahashi et al. (hereinafter "Takahashi"). Claims 18, 24, 25 and 26 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,999,117 to Yamazaki (hereinafter "Yamazaki"). Claims 17, 45, and 71 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. US2002/0040375 to Simon et al (hereinafter "Simon"). Claims 1, 3-5, 7-16, 19-22, 27, 29-31, 33-44, 46-50, 52, 54-60, 62-70 and 72-76 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,396,963 B2 to Shaffer et al (hereinafter "Shaffer").

Claim 18

Claim 18 stands rejected under 35 U.S.C. §102(e) as being anticipated by Takahashi.

Applicants have amended claim 18, and Applicants submit that Takahashi fails to teach each element of claim 18. For example, claim 18 recites, in part:

constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image to determine a first placement region on the first digital image for placing a second digital image, wherein locations of the one or more placement regions are based upon locations of the features in the first digital image.

Applicants submit that Takahashi fails to teach at least (1) constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image to determine a first placement region on the first digital image for placing a second digital image, (2) constructing one or more placement regions ... wherein the location of the one or more placement regions is based upon the location of the features in the first digital image.

Takahashi fails to teach at least “constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image to determine a first placement region on the first digital image for placing a second digital image” as recited in claim 18. The Office Action relies upon the print layout illustrated in Figs. 15 and 16 of Takahashi to teach this feature of claim 18. However, as described above, the creation of the print layout is a manual process and is not “performed at the data processing system” as recited in claim 18. The placement of images on the print layout is determined by a user manually dragging and dropping images in order to create a layout. Manually dragging and dropping images on a print layout is not “constructing at the data processing system one or more placement regions from the first digital image” as recited in claim 18. No image analysis technique is being applied by “data processing system” to extract features from a first digital image in order to determine a first placement region on the first digital image for placing a second digital image where the location of the one or more placement regions is based upon the location of the features in the first digital images as recited in claim 18. Therefore, Takahashi fails to teach “constructing one or more placement regions” as recited in claim 18.

Takahashi also fails to teach at least “constructing one or more placement regions ... wherein locations of the one or more placement regions are based upon locations of the features in the first digital image” as recited in claim 18. As described above, the Office Action relies upon the print layout illustrated in Figs. 15 and 16 of Takahashi to disclose constructing one or more placement regions based upon features extracted from the first digital image. However, as described above, in the print layout illustrated in Figs. 15 and 16, it is a user that determines the location where images are placed on the print layout by selecting and dragging an

image to a desired location within the print layout. See Takahashi, Figs. 15 and 16, and col. 12, lines 16-36. The locations of the images in the print layout of Takahashi are not based upon locations of features in the first digital image as recited in claim 18. Therefore, Takahashi also fails to teach this element of claim 18.

Accordingly, Applicants submit that Takahashi fails to anticipate claim 18 for at least the reasons provided.

Claims 18, 24, 25 and 26

Claims 18, 24, 25 and 26 stand rejected under 35 U.S.C. §102(c) as being anticipated by Yamazaki.

Applicants submit that Yamazaki fails to teach each element of claim 18. For example, claim 18 recites, in part:

constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image to determine a first placement region on the first digital image for placing a second digital image, wherein locations of the one or more placement regions are based upon locations of the features in the first digital image (emphasis added).

Yamazaki fails to teach at least (1) constructing at the data processing system one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to determine a first placement region on the first digital image for placing a second digital image, and (2) constructing one or more placement regions ... wherein locations of the one or more placement regions are based upon locations of the features in the first digital image.

Applicants submit that Yamazaki fails to teach at least “constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image to determine a first placement region on the first digital image for placing a second digital image” as recited in claim 18. The Office Action relies upon Fig. 7A and Fig. 4, reference numbers 170 and 172 to teach the constructing element of claim 18. However, Fig. 7A merely illustrates an exemplary predefined layout that includes a predefined placement area for an image (referred to in Fig. 7A as “Position for Synthesis of Designated Image”) in addition to a

predefined placement area for an illustration and a predefined placement area for text. Furthermore, Fig. 4 of Yamazaki, reference numbers 170 and 172 merely describe extracting a barcode region from an image (reference no. 170) and converting the information encoded in the barcode to coded information (reference no. 172). Yamazaki, Fig. 4. In Yamazaki, predefined layout information, such as that illustrated in Fig. 7 may be encoded into a two dimensional barcode and the barcode recorded onto a paper sheet (or other sheet material) such as the data input sheet pictured in Fig. 7B of Yamazaki. Additional information may also be added to the data input sheet by a user, such as a title and/or keywords describing and image. The user then photographs the data input sheet, and the camera identifies the layout of the data sheet using the layout information encoded in the two-dimensional barcode recorded on the data input sheet. See Yamazaki, Fig. 7B, and col. 26, line 25 – col. 27, line 7.

Nowhere in this process does the camera in Yamazaki “construct ... one or more placement regions from the first digital image based upon features extracted from the first digital image” as recited in claim 18. The layout information in Yamazaki is predefined and encoded in the barcode recorded on a data input sheet, and the camera in Yamazaki merely extracts and decodes the encoded predefined layout information from the barcode.

Furthermore, Yamazaki also fails to teach constructing placement regions “based upon features extracted from the first digital image” wherein “wherein locations of the one or more placement regions are based upon locations of the features in the first digital image” as recited in claim 18. As described above, the placement areas for images, text, and/or illustrations within a layout are predefined in Yamazaki and encoded in a two-dimensional barcode recorded on a data input sheet. The data input sheet that includes the barcode is photographed with the camera, and the camera extracts the layout information from the barcode on the data input sheet. The locations of placements areas within the layout are not based upon “locations of the features [extracted from] the first digital image” as recited in claim 18. Furthermore, even if the barcode were a “feature” as recited in claim 18, the locations of placement areas on the layout are completely independent from the location of the barcode on the data input sheet. Therefore, locations of placement regions within a layout are not determined by locations of features

extracted from the image as recited in claim 18. Accordingly, Applicants submit that Yamazaki fails to anticipate claim 18 for at least the reasons provided.

Furthermore, claim 24 should be allowable for a similar rationale as claim 18, and others.

Applicants further submit that Yamazaki also fails to teach each element of claim 25. For example, claim 25 recites, in part:

using the digital camera to capture a template image with the digital camera in a second mode, the template image comprising one or more bounded regions, each bounded region of the one or more bounded regions identifying a location on the template image for placing an image of the one or more images captured using the digital camera, wherein using the digital camera to capture the template image comprises:
selecting a button of the digital camera; and
using the digital camera to capture an image of the paper medium while
the button of the digital camera is selected (emphasis added).

Applicants submit that Yamazaki fails to teach at least using the digital camera to capture a template image by selecting a button of the digital camera and using the digital camera to capture an image of the paper medium while the button of the digital camera is selected.

Applicants submit that Yamazaki fails to teach “using the digital camera to capture an image of the paper medium while the button of the digital camera is selected” as recited in claim 25 (emphasis added). Instead, Yamazaki merely discloses a “menu switch 28” used for toggling between camera modes, such as “information input processing” mode and “image photographing” mode. See Yamazaki, col. 32, lines 47-61, and Fig. 1B. A user may switch the camera mode by depressing the menu switch button 28, and in response the camera displays a menu that enables the user to adjust various camera parameters. See Yamazaki, col. 31, lines 17-22, and Figs. 5A-5E. Yamazaki, however, is silent as to using the digital camera to capture an image of a paper medium while the button of the digital camera is being selected while the camera is in a template capture mode as recited in claim 26. In Yamazaki, the menu button is depressed in order to toggle between camera modes, but the menu button is not kept selected (i.e., kept depressed) while the camera is used to capture an image. Therefore, Yamazaki fails to teach at least this feature of claim 25.

Accordingly, Applicants submit that Yamazaki fails to anticipate claim 25 for at least the reasons provided. Furthermore, claim 26, which depends from claim 25, should also be allowable at least due to its dependence from claim 25.

Claims 17, 45, and 71

Claims 17, 45, and 71 stand rejected under 35 U.S.C. §102(e) as being anticipated by Simon.

Applicants have amended independent claims 17, 45, and 71, and Applicants submit that Simon fails to anticipate claims 17, 45, and 71. For example, claim 17 recites, in part, a method of generating a customized digital image performed by a data processing system, the method comprising:

determining at the data processing system a template image from the plurality of digital images based upon a selection entered via the image capture device;
constructing, at the data processing system, one or more placement regions from the template image based upon features extracted from the template image by applying an image analysis technique to the template image, each placement region of the one or more placement regions identifying a location on the template image for receiving a digital image from the plurality of digital images captured by the image capture device, wherein locations of the one or more placement regions are based upon locations of the features in the first digital image;
for each placement region of the one or more placement regions, placing a copy of a digital image from the plurality of digital images identified for the placement region in the placement region on the template image to generate the customized digital image at the data processing system (emphasis added).

Applicants submit that Simon fails to disclose at least (1) determining at the data processing system a template image from the plurality of digital images based upon a selection entered via the image capture device, (2) constructing one or more placement regions from the template image based upon features extracted from the template image, and (3) constructing one or more placement regions ... wherein locations of one or more placement regions are based upon locations of the features in the first digital image.

Applicants submit that Simon discloses a method for organizing digital images on a page, such as for creating a photo album. Simon provides a plurality of predetermined page layouts. Digital images to be placed on a page are analyzed in accordance with various predetermined criteria, and an appropriate page layout is selected from among the predetermined page layouts. See Simon, Abstract.

The Office Action states that Simon teaches all the elements recited in claim 17. Applicants respectfully disagree. For example, Applicants submit that Simon fails to teach “determining at the data processing system a template image from a plurality of template images based upon a selection entered via the image capture device” as recited in claim 17. The Office Action relies upon Fig. 5, reference numbers 100, 110, and 160 to teach this feature of claim 17. However, the Fig. 5 merely illustrates a “flow chart of a method for determining a page layout for a plurality of images.” Simon, paragraph 0037. The Office Action relies upon steps 110 and 160 to teach determining a template image from the plurality of digital images based upon a selection entered. However, step 110 of Fig. 5 merely discloses that the user specifies a format for a page layout by providing the height and width of the page, or alternatively by providing the aspect ratio of the page to be created. Simon, paragraph 0050. Furthermore, step 160 of Fig. 5 merely discloses that the user is presented with an opportunity to accept the page layout determined by the page layout subroutine or may alternatively iterate to another page layout using the page layout subroutine. Simon, paragraph 0050. Simon is also silent as to a user selection entered via the image capture device as recited in claim 17. Accordingly, Applicants submit that no template image is selected from the plurality of images based upon a selection entered via an image capture device as recited in claim 17.

Applicants submit that Simon also fails to disclose the “constructing” feature recited in claim 17. Claim 17 recites, in part, “constructing at the data processing system one or more placement regions from the template image based upon features extracted from the template image.” As describe above, Simon does not use template images for determining a page layout. Instead of templates, Simon discloses the use of a page layout subroutine to determine where on a page images should be placed. The “page layout subroutine” uses a set of predetermined criteria, such as image size and total available page area, to determine image placement on a page. See Simon, paragraphs 0052-0055. Therefore, Simon determines placement locations of images on a page layout based upon characteristics of the photos to be placed on a page and the dimensions of the page and/or the aspect ratio of the page rather than by placing images in placement regions of a template image as recited in Applicants’ claim 17.

Applicants further submit that Simon also fails to disclose “constructing one or more placement regions ... wherein locations of one or more placement regions are based upon locations of the features in the first digital image” as recited in claim 17. Simon fails to teach that locations of one or more placement regions are based upon locations of features in the first digital image. As described above, the location where images are placed on a page are determined by the page layout subroutine. The locations at which images are placed on a page in Simon are determined by the page layout subroutine using predetermined criteria and are not based upon locations of features in a first digital image. Accordingly, Simon also fails to disclose this feature of claim 17.

Applicants submit that Simon further fails to teach at least “placing a copy of a digital image from the plurality of digital images identified for the placement region in the placement region on the template image to generate the customized digital image” as recited in Applicants’ claim 17 (emphasis added). As recited in claim 17, the customized digital image is generated by placing a copy of a digital image into the template image itself. Accordingly, the template image itself is transformed into the customized digital image. Applicants submit that this is not taught by Simon. Instead, as described above, Simon describes the use of a page layout routine for determining image position on a page layout. The page layout in Simon is not a template image as recited in claim 17. The page layout is merely a file that includes a number of page layout attributes, such as number of images, orientation, and physical location of the images on a page. Simon, paragraph 0051. Therefore, when the page layout subroutine of Simon determines a page layout for a set of images, it is not placing a copy of a digital image or images into a template image to create a composite image as recited in claim 17. Applicants thus submit that this feature of claim 17 is not taught or suggested by Simon.

Accordingly, Applicants submit that Simon fails to anticipate claim 17 for at least the reasons provided. Furthermore, Applicants respectfully submit that claims 45 and 71 should be allowable for at least a similar rationale as that discussed for allowing claim 17, and others.

Claims 1, 3-5, 7-16, 19-22, 27, 29-31, 33-44, 46-50, 52, 54-60, 62-70 and 72-76

Claims 1, 3-5, 7-16, 19-22, 27, 29-31, 33-44, 46-50, 52, 54-60, 62-70 and 72-76 stand rejected under 35 U.S.C. §102(e) as being anticipated by Shaffer.

Applicants have amended independent claims 1, 18, 27, 45, 52, 54, 57, and 72, and Applicants submit Shaffer fails to teach each of the features recited in the independent claims. For example, claim 1 recites, in part, a method of generating a customized digital image performed by a data processing system, the method comprising:

constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image, each placement region of the one or more placement regions identifying a location on the first digital image for placing a digital image from a first set of digital images captured using the image capture device, wherein locations of the one or more placement regions are based upon locations of the features in the first digital image; identifying, at the data processing system, for each placement region of the one or more placement regions, a digital image from the first set of digital images to be placed in the placement region; and

for each placement region of the one or more placement regions, placing, at the data processing system, a digital image from the first set of digital images identified for the placement region in the placement region on the first digital image to generate the customized digital image.

Applicants submit that Shaffer fails to teach at least (1) constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image, and (2) constructing placement regions ... wherein locations of the one or more placement regions are based upon locations of the features in the first digital image.

Applicants submit that Shaffer fails to teach “constructing at the data processing system one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image, each placement region of the one or more placement regions identifying a location on the first digital image for placing a digital image from a first set of digital images captured using the image capture device” as recited in claim 1. The Office Action relies upon Fig. 6, “change or delete photo or choose new template” and col. 11, lines 28-31. However, the cited portions of Shaffer merely disclose that a user may change or delete a photo in a layout or may alternatively select a new layout for a page. The cited portion of Shaffer, however, is not “performed by the data processing system” as recited in claim 1, nor is merely moving or deleting images from

placement regions in predefined template “constructing ... one or more placement regions from the first digital image” as recited in claim 1.

Furthermore, the portions of the Shaffer cited in the Office Action as teaching this feature of claim 1, when taken in context, merely describe the flow chart provided in Fig. 5 of Shaffer that illustrates the steps performed in preparing a photocollage. A user is provided with a set of scaled image stickers and templates used to modify the first cut version of the photocollage. If the user wishes to construct additional pages for the photocollage, the user peels off the stickers associated with one or more images from sticker sheet 118 and affixes the stickers to page layout form 160 depicted in Fig. 9. The page layout form includes one or more scaled page representations that include an allowable location to place a sticker. The image associated with the sticker will be placed in that location on the layout and scaled to fit the box associated with the allowable placement region. The user may also move or delete existing photos in a layout by marking an image with an “X” to indicate that an image should be removed and by circling an image and drawing an arrow to the location where the image is to be moved on the photocollage. Applicants, therefore, submit that Shaffer merely enables a user to place images within predefined locations on a layout, and to move or to delete images that have already been placed in the layout. The user is limited to selecting one of the predefined locations for placing the image though, and is not able to construct new locations for placing an image within a layout.

Applicants further submit that Shaffer also fails to teach at least “constructing placement regions ... wherein locations of the one or more placement regions are based upon locations of the features in the first digital image” as recited in claim 1. In Shaffer, a user creates a photocollage page by affixing stickers to a set of photocollage layout options sheets comprising a set of predefined template layouts with predetermined image placement areas. See Shaffer, Fig. 9. Once the user has selected a layout for a photocollage page by affixing photo identification stickers to the layout sheet, the photocollage layout option sheet is scanned. The system reads a barcode (Shaffer, Fig. 9, reference no. 164) on the layout sheet to determine which of the predefined layout sheets the user has selected, and the system determines which of the predefined image placement areas the user has affixed photo identification stickers. Thus, in

Shaffer, the locations of the image placement areas are not based upon the locations of features in the image as recited in claim 1, but are instead determined prior to the layout options sheet being generated.

Furthermore, Shaffer identifies which layout options sheet has been selected by the user based upon the identifier encoded in the barcode (Shaffer, Fig. 9, reference no. 164). Even if the barcode in Shaffer were, *arguendo*, a “feature” as recited in claim 1 (which it is not), the location of the barcode on the page layout sheet does not correspond to the location of the predefined placement regions. Therefore, even if the barcode were a “feature” extracted from the first digital image as recited in claim 1, the “locations of one or more image placement regions” are not based upon the location of the barcode on the layout sheet. Therefore, Applicants submit that Shaffer fails to teach this feature of claim 1.

Accordingly, Applicants submit that Shaffer fails to anticipate claim 1 for at least the reasons provided.

Applicants submit that independent claims 18, 27, 45, 52, 54, 57, and 72 should also be allowable for at least a similar rationale as claim 1, and others. Furthermore, dependent claims 3-5 and 7-16, 19-22, 29-31 and 33-44, 47-50, 55 and 56, 58-60 and 62-70, and 73-76 are also allowable at least due to their dependence from independent claims 18, 27, 45, 54, 57, and 72, respectively.

Claim Rejections under 35 U.S.C. §103

Claims 6, 23, 32, 51, 61, and 77 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Shaffer in view of U.S. Patent No. 6,690,396 to Anderson (hereinafter “Anderson”).

Applicants submit that claims 6, 23, 32, 51, 61, and 77, which depend from directly or indirectly from claims 1, 18, 27, 46, 57, and 72, respectively, recite features that are not made obvious by the combination of Shaffer and Anderson.

As demonstrated above, Shaffer fails to teach at least 1) constructing, at the data processing system, one or more placement regions from the first digital image based upon features extracted from the first digital image (2) constructing placement regions ... wherein

locations of the one or more placement regions are based upon locations of the features in the first digital image as variously recited in claims 1, 18, 27, 46, 57, and 72.

Furthermore, Anderson similarly fails to disclose or suggest at least these features of claims 1, 18, 27, 46, 57, and 72 described above. Applicants submit that Anderson describes "a system and method for scannable executable design" that includes:

A "system and method for developing an executable includes scanning an image and identifying a representation of a user interface element included in the scanned image. An executable is then formatted to include a user interface element corresponding to the identified representation of the user interface element. ... [A] representation of a user interface element suitable for scanning includes an object capable of being positioned on a medium, the object representing the user interface element. The object is capable of being identified as corresponding to the user interface element so that when the object is scanned, a executable is formatted to include the user interface element corresponding to the identified representation of the user interface element." Anderson, Abstract.

In Anderson, a user affixes stickers or other representations of user interface components to a tangible medium, and the tangible medium with the representation of the user interface components affixed to it is then scanned. See Anderson, col. 3, line 61 - col.4, line3. The purpose of this is to enable a user to layout the user interface of an executable, such as a web page, without requiring that the user have technical knowledge of computer programming and design. Anderson, col. 3, lines 16-24. The scanned image is analyzed and the identity and placement of various user interface components on the tangible media are determined.

Applicants submit that Anderson is silent as to "constructing at the data processing system one or more placement regions from the first digital image based upon features extracted from the first digital image by applying an image analysis technique to the first digital image, each placement region of the one or more placement regions identifying a location on the first digital image for placing a digital image from a first set of digital images captured using the image capture device" as recited, for example, in Applicants' claim 1. Anderson fails to disclose constructing one or more placement regions from the first digital image as recited in claim 1. Instead, in Anderson, a user affixes a sticker or other pre-defined representation of a user interface component to a tangible medium, such as a sheet of paper, and the tangible

medium is then scanned to generate the user interface of an executable such as a webpage. See Anderson, col. 3, line 61 – col.4, line3. Thus, placement of the user interface components is determined based upon the location on the tangible medium where the user affixed the user interface representations. Therefore, the system in Anderson does not construct one or more placement regions on a template image based upon features extracted from the digital image as recited in claim 1.

Applicants further submit that Anderson also fails to disclose “constructing one or more placement regions ... wherein locations of one or more placement regions are based upon locations of the features in the first digital image” as recited in Applicants’ claim 1. As described above, in Anderson, a user selects a location on the tangible medium for a user interface component, and affixes a predefined representation of the user interface component (such as a sticker) to a tangible medium at the selected location in order to create a layout for an executable. See Anderson, Figs. 1 and 2. Thus, the locations at which user interface components are placed in Anderson are determined by the user and are not determined based upon “locations of features in the first digital image” as recited claim1. Therefore, Anderson also fails to disclose or suggest this feature of claim 1.

Accordingly, even if Shaffer and Anderson were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not teach or suggest the features above recited in claims 1, 18, 27, 46, 57, and 72. Accordingly, Applicants submit that this is an additional reason for allowing claims 6, 23, 32, 51, 61, and 77.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Jeffrey S. King
Reg. No. 58,791

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
Attachments
JSK:jsk
61085491 v1